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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/955,264	09/10/2001	Kemal Guler	HP-10014767	8692

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HEWLETT-PACKARD COMPANY
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EXAMINER	
SHRESTHA, BIJENDRA K	

ART UNIT	PAPER NUMBER
3691	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/955,264

Applicant(s)

GULER ET AL.

Examiner

Bijendra K. Shrestha

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-21 are presented for examination. Applicant filed an amendment on 08/06/2007 amending claims 1, 4, 8, 11, 15, 18 and 20. After careful consideration of applicant's arguments and amendments, new grounds of rejections of claims necessitated by Applicant's amendment are established in the instant application as set forth in detail below. Applicant's arguments with respect to claims 1, 4, 8, 11, 15, 18 and 20 have been considered but are moot in view of the new ground(s) of rejection.

Withdrawal of Double Patenting Rejection

Further to submission of terminal disclaimer for claims 1-21 of instant application over claims of copending applications 09/902,880, 09/902,928, 09/903,075 and 09/858,251, the Examiner respectfully withdraws nonstatutory obvious double patenting rejection for the application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-21 rejected under 35 U.S.C. 103(a) as being unpatentable over Rackson, U.S. Patent No. 6,415,270 (reference A in attached PTO-892) in view of Bishop et al., U.S. Patent No. 6,556,960 (reference B in attached PTO-892).
2. As per claim 1, Rackson teaches a method for determining an optimal bid for an item in a market, said method comprising:
 - a) selecting characteristics of said market (see Fig. 13 (step 600); column 9, lines 25-35);
 - b) selecting a bidding model (see column 11, lines 2-5, 24-26; column 22, lines 26-29);
 - c) estimating a structure of said market (see Fig. 13, steps 610; column 19, lines 4-21);
 - d) determining a bid function (see Fig. 13, step 612; column 8, lines 11-17); and
 - e) determining said optimal bid (see Fig. 13, step 650; column 8, lines 60-62).

Rackson et al. do not teach unobservable variables are expressed in terms of observable bids by inverting said bidding model for estimating a structure of said market.

Bishop et al. teach unobservable variables are expressed in terms of observable bids by inverting said bidding model estimating a structure of said market (Bishop et al., Fig. 2 and 3; column 1, lines 25-65; column 2, lines 22-33; column 5, lines 35-60).

Therefore, it would have been obvious to one of ordinary skill in the art the time the Applicant's invention was made to modify the teachings of Rackson et al. to include the teachings of Bishop et al. The motivation to combine these references is to facilitate

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representation of unobservable variables by inferring the corresponding posterior distribution of at least a subset of the unobservable variables (Bishop et al., column 1, lines 53-56).

3. As per claim 2, Rackson teaches claim 1 as described above. Rackson further teaches the method wherein said step a) comprises:

receiving a first user input, wherein said first user input comprises information identifying an item to be bid on (see Fig. 11 and 12; column 24, lines 5-24; column 23, lines 39-41);

accessing a database (see Figs. 10, 11 and 12; column 23, lines 30-55);

retrieving historical bids data from said database; retrieving auction characteristics data from said database, wherein said auction characteristics data comprise information relating to historical auctions of items similar to said item to be bid on; outputting said historical bids data; and outputting said auction characteristics data (see Fig. 13; steps 600, 610 and 612; column 24, lines 57-62).

4. As per claim 3, Rackson teaches claim 1 as described above. Rackson further teaches the method wherein said step b) comprises:

receiving auction characteristics data; accessing a database; retrieving from said database said bidding model, wherein said bidding model is selected based on a corresponding relevance of said auction characteristics data; and outputting said bidding model (see column 22, lines 26-29; 49-55)).

5. As per claim 4, Rackson teaches claim 1 as described above. Rackson further teaches the method wherein said step c) comprises:

receiving said bidding model; receiving historical bids data (see column 18, lines 49-52);

transforming said historical bids data to a sample of inverted bids, wherein said historical bids data are transformed by inverting said bidding model; estimating a structure of said market, wherein said sample of inverted bids receives application of statistical density estimation techniques to obtain said structure; and outputting said structure (see column 18, lines 53-63).

6. As per claim 5, Rackson teaches claim 1 as described above. Rackson further teaches the method wherein said step d) comprises:

receiving a second user input; receiving a structure; generating a bid function, wherein said bid function is based on said structure and said second user input; and outputting said bid function (see Fig. 12; column 24, lines 5-56).

7. As per claim 6, Rackson teaches claim 5 as described above. Rackson further teaches the method, wherein said second user input comprises:

an auction format; a valuation of said item; and an expected number of rival bidders (see Fig. 5, 6, 7, 8 and 14).

8. As per claim 7, Rackson teaches claim 1 as described above. Rackson further teaches the method, wherein said step e) comprises:

receiving a third user input, wherein said third user input comprises an evaluation criteria (see Fig. 13, step 630 and 640; column 25, lines 35-39);

receiving said bid function; calculating said optimal bid based on said third user input and said bid function; and outputting said optimal bid (see Fig. 13, steps 650 and 654; column 25, lines 39-41).

9. As per claim 8, Rackson teaches a computer system comprising:
- a bus (see Fig. 10; connects memory (32) and processor (36));
 - a memory interconnected with said bus (see Fig. 10; memory (32)); and
 - a processor interconnected with said bus (see Fig. 10, memory (32)),
- wherein said processor executes a method for determining an optimal bid for an item in a market, said method comprising:
- a) selecting characteristics of said market (see Fig. 13 (step 600); column 9, lines 25-35);
 - b) selecting a bidding model(see column 11, lines 2-5, 24-26; column 22, lines 26-29);
 - c) estimating a structure of said market (see Fig. 13, steps 610; column 19, lines 4-21);
 - d) determining a bid function (see Fig. 13, step 612; column 8, lines 11-17); and
 - e) determining said optimal bid (see Fig. 13, step 650; column 8, lines 60-62).

Rackson et al. do not teach unobservable variables are expressed in terms of observable bids by inverting said bidding model for estimating a structure of said market.

Bishop et al. teach unobservable variables are expressed in terms of observable bids by inverting said bidding model estimating a structure of said market (Bishop et al., Fig. 2 and 3; column 1, lines 25-65; column 2, lines 22-33; column 5, lines 35-60).

Therefore, it would have been obvious to one of ordinary skill in the art the time the Applicant's invention was made to modify the teachings of Rackson et al. to include the teachings of Bishop et al. The motivation to combine these references is to facilitate representation of unobservable variables by inferring the corresponding posterior distribution of at least a subset of the unobservable variables (Bishop et al., column 1, lines 53-56).

10. As per claim 9, it is rejected with same rational as claim 2.

11. As per claim 10, it is rejected with same rational as claim 3.

12. As per claim 11, it is rejected with same rational as claim 4.

13. As per claim 12, it is rejected with same rational as claim 5.

14. As per claim 13, it is rejected with same rational as claim 6.

15. As per claim 14, it is rejected with same rational as claim 7.

16. As per claim 15, Rackson teaches a computer readable medium for causing a computer system to execute the steps in a method for determining an optimal bid for an item in a market (see Figs. 3, 10 and 11),

said method comprising:

a) selecting characteristics of said market (see Fig. 13 (step 600); column 9, lines 25-35);

b) selecting a bidding model(see column 11, lines 2-5, 24-26; column 22, lines 26-29);

c) estimating a structure of said market(see Fig. 13, steps 610; column 19, lines 4-21);

d) determining a bid function (see Fig. 13, step 612; column 8, lines 11-17); and

e) determining said optimal bid (see Fig. 13, step 650; column 8, lines 60-62).

Rackson et al. do not teach unobservable variables are expressed in terms of observable bids by inverting said bidding model for estimating a structure of said market.

Bishop et al. teach unobservable variables are expressed in terms of observable bids by inverting said bidding model estimating a structure of said market (Bishop et al., Fig. 2 and 3; column 1, lines 25-65; column 2, lines 22-33; column 5, lines 35-60).

Therefore, it would have been obvious to one of ordinary skill in the art the time the Applicant's invention was made to modify the teachings of Rackson et al. to include the teachings of Bishop et al. The motivation to combine these references is to facilitate representation of unobservable variables by inferring the corresponding posterior distribution of at least a subset of the unobservable variables (Bishop et al., column 1, lines 53-56).

17. As per claim 16, it is rejected with same rational as claim 2.

18. As per claim 17, it is rejected with same rational as claim 3.

19. As per claim 18, it is rejected with same rational as claim 4.

20. As per claim 19, it is rejected with same rational as claim 5.

21. As per claim 20, it is rejected with same rational as claim 6.
22. As per claim 21, it is rejected with same rational as claim 7.

Response to Arguments

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Applicant's arguments with respect to claims 1, 4, 8, 11, 15, 18 and 20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosures. Applicant is required under 37 CFR 1.111(c) to consider references fully when responding to this action.

The following are pertinent to current invention, though not relied upon:

Ausubel (U.S. Patent No. 6,021,398) teaches computer implemented method and apparatus for auctions.

Feinberg (U.S. Patent No. 6,366,891) teaches data processing system for conducting a modified on-line auction.

Gujral et al. (U.S. Pub No. 2002/0042769) teach system and method for conducting electronic auction with multi-parameter optimal bidding.

Harrington et al. (U.S. Patent No. 6,161,099) teach process and apparatus for conducting auction over electronic networks.

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Hambrecht et al. (U.S. Patent No. 6,629,082) teach auction system and method for pricing and allocation during capital formation.

Luke et al. (U.S. Patent No. 6,131,087) teach method for automatically identifying, matching, and near-matching buyers and sellers in electronic market transactions.

Lupien et al. (U.S. Patent No. 5,101,353) teach automated system for providing liquidity to securities markets.

Messmer et al. (U.S. Patent No. 7,096,197) teach methods and apparatus for simulating competitive bidding yield.

Seymor et al. (U.S. Patent No. 6,871,190) teach system and method for conducting an electronic auction over an open communications network.

Shoham (U.S. Patent No. 6,285,989) teaches universal on-line trading market design and deployment system.

Zellner, Arnold (International Economic Review, October, 1970) teaches estimation of regression relationships containing unobservable independent variables.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

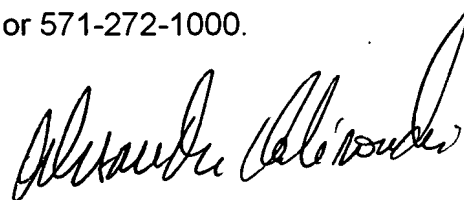
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bijendra K. Shrestha whose telephone number is (571)270-1374. The examiner can normally be reached on 7:00AM-4:30PM (Monday-Friday); 2nd Friday OFF.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander Kalinowski can be reached on (571)272-6771. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

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Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read "Alexander Kalinowski", written in a cursive style.

BKS

ALEXANDER KALINOWSKI
SUPERVISORY PATENT EXAMINER